

1
2 **CLAIMS**

3 1. A method in a server-client environment, the method comprising:
4 receiving a driver identifier for a printer attached to the client;
5 using the driver identifier to select a closest matching driver of a plurality
6 of drivers to install at the server;
7 installing, at the server, the selected driver; and
8 allowing applications executing on the server to print to the printer using
9 the installed driver.

10
11 2. A method as recited in claim 1, wherein the receiving comprises
12 receiving the driver identifier from the client.

13
14 3. A method as recited in claim 1, wherein the driver identifier includes
15 both a driver name and a driver version.

16
17 4. A method as recited in claim 1, wherein the using comprises
18 accessing a library at the server that stores the plurality of drivers.

19
20 5. A method as recited in claim 1, wherein:
21 the using comprises checking whether any of the plurality of drivers has a
22 corresponding driver identifier that is the same as the received driver identifier;
23 and
24
25

1 if a particular driver of the plurality of drivers has a corresponding driver
2 identifier that is the same as the received driver identifier, then selecting that
3 driver to install at the server.

4
5 6. A method as recited in claim 1, wherein:

6 the using comprises checking whether any of the plurality of drivers
7 currently has a corresponding driver identifier that is different than the received
8 driver identifier but that corresponds to the same driver as the received driver
9 identifier; and

10 if a particular driver of the plurality of drivers currently has a corresponding
11 driver identifier that is different than the received driver identifier but that
12 corresponds to the same driver as the received driver identifier, then selecting that
13 driver to install at the server.

14
15 7. A method as recited in claim 6, wherein one of the plurality of drivers
16 currently has a corresponding driver identifier that is different than the received
17 driver identifier but that corresponds to the same driver because of a driver name
18 change by a source of the driver.

19
20 8. A method as recited in claim 6, further comprising:

21 issuing a notification that the selected driver currently has a corresponding
22 driver identifier that is different than the received driver identifier but that
23 corresponds to the same driver as the received driver identifier.

Sub
B1

to be added to the list of drivers

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

9. A method as recited in claim 1, wherein:
the receiving comprises receiving a driver name and a driver version;
the using comprises checking whether any of the plurality of drivers has a
corresponding driver name that is the same as the received driver name; and
if a particular driver of the plurality of drivers has a corresponding driver
name that is the same as the received driver name, then selecting that driver to
install at the server.

10. A method as recited in claim 9, further comprising:
selecting a first driver with a corresponding driver name that is the same as
the received driver name to install at the server without regard for whether the
received driver version is the same as a corresponding driver version of the first
driver.

11. A method as recited in claim 9, further comprising:
issuing a notification that the selected driver has a corresponding driver
name that is the same as the received driver name but a corresponding driver
version that is different than the received driver version.

12. A method as recited in claim 9, further comprising:
checking whether the selected driver has a corresponding driver version
that is the same as the received driver version; and
if the selected driver does not have a corresponding driver version that is
the same as the received driver version, then obtaining a new copy of the driver
that has the same driver version as the received driver version.

1
2 **13.** A method as recited in claim 12, further comprising obtaining a new
3 copy of the driver only if the received driver version indicates a more recent
4 version of the driver than is indicated by the driver version corresponding to the
5 selected driver.

6
7 **14.** At least one computer-readable memory containing a computer
8 program that is executable by a processor to perform the method recited in claim
9 1.

10
11 **15.** A method implemented in a server in a server-client environment,
12 the method comprising:

13 automatically selecting at least one of a plurality of drivers corresponding
14 to a peripheral device attached to the client; and

15 installing, at the server, the selected at least one driver.

16
17 **16.** A method as recited in claim 15, wherein the peripheral device
18 comprises a printer.

19
20 **17.** A method as recited in claim 15, wherein the automatically selecting
21 comprises using a received driver identifier corresponding to a printer to select a
22 closest matching driver of the plurality of drivers to install at the server.

1 **18.** A method as recited in claim 15, wherein:
2 the automatically selecting comprises checking whether any of the plurality
3 of drivers has a corresponding driver identifier that is the same as a received driver
4 identifier; and

5 if a particular driver of the plurality of drivers has a corresponding driver
6 identifier that is the same as the received driver identifier, then installing that
7 driver at the server.

8
9 **19.** A method as recited in claim 15, wherein:
10 the automatically selecting comprises checking whether any of the plurality
11 of drivers currently has a corresponding driver identifier that is different than a
12 received driver identifier but that corresponds to the same driver as the received
13 driver identifier; and

14 if a particular driver of the plurality of drivers currently has a corresponding
15 driver identifier that is different than the received driver identifier but that
16 corresponds to the same driver as the received driver identifier, then installing that
17 driver at the server.

18
19 **20.** A method as recited in claim 19, further comprising:
20 issuing a notification that the installed driver currently has a corresponding
21 driver identifier that is different than the received driver identifier but that
22 corresponds to the same driver as the received driver identifier.
23
24
25

1 **21.** A method as recited in claim 15, wherein:
2 the automatically selecting comprises checking whether any of the plurality
3 of drivers has a corresponding driver name that is the same as a received driver
4 name; and

5 if a particular driver of the plurality of drivers has a corresponding driver
6 name that is the same as the received driver name, then installing that driver at the
7 server.

8
9 **22.** A method as recited in claim 21, further comprising:
10 selecting a first driver with a corresponding driver name that is the same as
11 the received driver name to install at the server without regard for whether a
12 received driver version is the same as a corresponding driver version of the first
13 driver.

14
15 **23.** A method as recited in claim 21, further comprising:
16 issuing a notification that the installed driver has a corresponding driver
17 name that is the same as the received driver name but a corresponding driver
18 version that is different than the received driver version.

19
20 **24.** A method as recited in claim 21, further comprising:
21 checking whether the installed driver has a corresponding driver version
22 that is the same as a received driver version; and

23 if the selected driver does not have a corresponding driver version that is
24 the same as the received driver version, then obtaining a new copy of the driver
25 that has the same driver version as the received driver version.

1
2 25. At least one computer-readable memory containing a computer
3 program that is executable by a processor to perform the method recited in claim
4 15.

5
6 26. One or more computer-readable media having stored thereon a
7 computer program that, when executed by one or more processors of a server,
8 causes the one or more processors to:

9 receive a printer driver identifier for a printer attached to a client;

10 use the printer driver identifier to select one of a plurality of printer drivers
11 to install at the server according to the following,

12 if a particular printer driver of the plurality of printer drivers has a
13 corresponding printer driver identifier that is the same as the received
14 printer driver identifier, then selecting that particular driver,

15 if a particular printer driver of the plurality of printer drivers
16 currently has a corresponding printer driver identifier that is different than
17 the received printer driver identifier but that corresponds to the same printer
18 driver as the received printer driver identifier, then selecting that particular
19 printer driver, and

20 if a particular printer driver of the plurality of printer drivers has a
21 corresponding driver name that is the same as a driver name received as
22 part of the printer driver identifier, then selecting that particular printer
23 driver without regard for whether that particular printer driver has a
24 corresponding driver version that is the same as a driver version received as
25 part of the printer driver identifier; and

Cont.
Sub A B

install, at the server, the selected printer driver.

2
3 27. A method as recited in claim 26, wherein the server comprises a
4 terminal server and wherein the client comprises a terminal server client.

5
6 Sub B1 28. A method as recited in claim 26, wherein one of the plurality of
7 printer drivers currently has a corresponding printer driver identifier that is
8 different than the received printer driver identifier but that corresponds to the same
9 printer driver due to a name of the printer driver being changed.

10
11 29. An apparatus comprising:
12 a driver library including a plurality of printer drivers; and
13 a driver matching module to select at least one of the plurality of printer
14 drivers for installation on the apparatus, the selected at least one printer driver
15 corresponding to a printer attached to a client computer.

16
17 Sub A 30. An apparatus as recited in claim 29, wherein the driver matching
18 module is further to:

19 check whether any of the plurality of drivers has a corresponding driver
20 identifier that is the same as a received driver identifier; and

21 if a particular driver of the plurality of drivers has a corresponding driver
22 identifier that is the same as the received driver identifier, then install that driver
23 on the apparatus.
24
25

1 31. An apparatus as recited in claim 29, further comprising:
2 a mapping table to map previous driver identifiers to subsequent driver
3 identifiers;

4 wherein the driver matching module is further to check the mapping table
5 to determine whether any of the plurality of drivers currently has a corresponding
6 driver identifier that is different than a received driver identifier but that is a
7 subsequent driver identifier mapped to the received driver identifier as a previous
8 driver identifier; and

9 if a particular driver of the plurality of drivers currently has a corresponding
10 driver identifier that is different than a received driver identifier but that is a
11 subsequent driver identifier mapped to the received driver identifier as a previous
12 driver identifier, then the driver matching module is further to install that driver at
13 the server.

14
15 32. An apparatus as recited in claim 29, wherein the driver matching
16 module is further to:

17 check whether any of the plurality of printer drivers has a corresponding
18 driver name that is the same as a received driver name; and

19 if a particular printer driver of the plurality of printer drivers has a
20 corresponding driver name that is the same as the received driver name, then
21 install that printer driver on the apparatus without regard for whether that
22 particular printer driver has a corresponding driver version that is the same as a
23 received driver version.
24
25

Cont
Sub
All

1 33. A system comprising:
2 a client computer having a local printer attached thereto; and
3 a server computer coupled to the client computer via a network, wherein the
4 server computer includes,

5 a driver library including a plurality of printer drivers, and

6 a driver matching module to select at least one of the plurality of
7 printer drivers for installation on the server computer to allow applications
8 executing on the server computer to print to the local printer, the driver
9 matching module selecting one of the plurality of printer drivers for
10 installation based on a printer driver identifier and according to the
11 following,

12 if a particular printer driver of the plurality of printer drivers
13 has a corresponding printer driver identifier that is the same as the
14 received printer driver identifier, then selecting that particular driver
15 for installation,

16 if a particular printer driver of the plurality of printer drivers
17 currently has a corresponding printer driver identifier that is different
18 than the received printer driver identifier but that corresponds to the
19 same printer driver as the received printer driver identifier, then
20 selecting that particular printer driver for installation, and

21 if a particular printer driver of the plurality of printer drivers
22 has a corresponding driver name that is the same as a driver name
23 received as part of the printer driver identifier, then selecting that
24 particular printer driver without regard for whether that particular
25 printer driver has a corresponding driver version that is the same as a

Cont
Sub
A4

driver version received as part of the printer driver identifier for installation.

34. A system as recited in claim 33, wherein the client computer is to transmit the printer driver identifier to the server computer.

add
B1

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25